

ABSTRACT OF THE DISCLOSURE

A content addressable memory (CAM) device having a memory, a hash index generator to associate a search value with a unique location within a memory, and a compare circuit. The index generator generates an index based on the search value. The memory receives the index from the index generator and outputs a stored data value from a location indicated by the index. A compare circuit receives the data value from the memory and compares the data value and the search value to generate a match signal indicative of whether the data value and search value match. The match signal and index are output from the CAM device.